

Arizona Department of Environmental Quality  
Air Quality Division

June 13, 2001

**RESPONSIVENESS SUMMARY**  
**to**  
**Testimony Taken at Oral Proceeding and Written Comments Received on**  
**The Proposed Maricopa County PM<sub>10</sub> State Implementation Plan Revision**  
**pertaining to Agricultural Best Management Practices**

The oral proceeding on the proposed Maricopa County PM<sub>10</sub> State Implementation Plan (SIP) Revision pertaining to Agricultural Best Management Practices, was held at 4:00 p.m., Wednesday, May 30, 2001, at Arizona Department of Environmental Quality, 3033 North Central Avenue, Conference Room 1706. The Arizona Department of Environmental Quality (ADEQ) received written comments from one organization during the public comment period, which ended May 30, 2001. The public comments and ADEQ's responses are described below.

**Comment #1:**

The commenter stated that the proposed SIP revision does not include the most stringent measures (MSM) because the Arizona rule does not uniformly require the cessation of tilling on high wind days as is required in South Coast Air Quality Management District's (SCAQMD) Rule 403. The commenter stated that ADEQ's observation that "No research currently exists which demonstrates that cessation of high wind tilling when gusty winds exceed 25 mph in the Maricopa County area is more effective at reducing PM<sub>10</sub> than the agricultural PM<sub>10</sub> general permit ...." is irrelevant and the more appropriate inquiry is whether mandatory cessation of tilling on high wind days combined with the implementation of at least one other BMP (as Rule 403 requires) would be more effective at reducing PM<sub>10</sub>.

**Response:**

In its proposed approval of the Maricopa County PM<sub>10</sub> Serious Area Plan for the Annual Standard, the United States Environmental Protection Agency (EPA) defined MSM to be the maximum degree of emission reduction that has been required or achieved from a source or source category in other SIPs or in practice in other states and can feasibly be implemented in the area (65 FR 19968; April 13, 2000).

In SCAQMD's 1997 Air Quality Management Plan control measure summary of the requirement to implement soil conservation plans and its staff report for the proposed amended Rule 403, SCAQMD estimated emission reductions from mandatory cessation of tilling on high wind days combined with the implementation of vegetative cover. The analysis estimated 9.0 tons per day emission reductions for

SCAQMD's Rule 403 agricultural provision [specifically, Rule 403 (h)(1)(B)] in 2006 and 2010.<sup>1</sup> and <sup>2</sup>

In comparison, ADEQ estimated 36.6 percent (398 tons per day) emission reduction from the 1995 design-day emission due solely to implementation of best management practices. In addition, ADEQ estimated an overall emission reduction of 60.3 percent (1,045 tons per day), which included the estimated 37 percent land use reduction.<sup>3</sup>

The above analysis shows Arizona's rule is consistent with EPA's definition of MSM.

**Comment #2:**

The commenter stated that in addition to the mandatory provision regarding high wind days, Rule 403 establishes six categories of management practices, and requires operators to implement at least one of those measure in five of the six categories, and no less than three measures must be implemented from the "inactive" category. Thus under Rule 403, when the cessation of tilling on high wind days is included, each commercial farmer is required to implement a minimum of nine control measures. In comparison, the Arizona rule only requires a total of three control measures.

**Response:**

In its proposed approval of the Maricopa County PM<sub>10</sub> Serious Area Plan for the Annual Standard, EPA detailed its approach to evaluate the impact of the overall control strategy on emissions in a source category against the impact of the overall control strategy on the source category in other areas, and to review all the elements of a rule that apply to a specific type of source as an inseparable measure (65 FR 19969, April 13, 2000). Because stringency is based on an emission level, the number of management practices or the number of measures required to be implemented is irrelevant. Further clarification is provided in the final Revised Background Information document (see pp.17 - 19)

**Comment #3:**

The commenter stated that there is no plausible justification for relaxing the stringency of Rule 403. Virtually all of the control measures listed in Rule 403 were mirrored in the Arizona rule, so it is clear that their implementation would be feasible. The commenter stated that the state's contention that "the application of more than one BMP at a time for a selected category would only provide for incremental PM<sub>10</sub> reductions sometimes at an uneconomical cost," is not supported by any competent data and

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<sup>1</sup>1997 Air Quality Management Plan. Final Appendix IV-A. Stationary and Mobile Source Control Measures. South Coast Air Quality Management District. November 1996. p. IV-1-172.

<sup>2</sup>Revised Final Staff Report for Proposed Amended Rule 403 and Proposed Rule 1186. Appendix F - Emissions Reductions Estimates. South Coast Air Quality Management District. February 14, 1997. pp. F-5, F-10.

<sup>3</sup>Technical Support Document for Quantification of Agricultural Best Management Practices, Final. June 8, 2001. URS Corporation and Eastern Research Group, Inc.

improperly delegates virtually all regulatory discretion to the regulated community. In order to obtain the requested extension of the attainment deadline, Arizona's SIP must include an agricultural measure that is as least as stringent as Rule 403.

**Response:**

See response to comment #1 and #2.

**Comment #4:**

The commenter stated that the State's reliance upon the control measure to reduce particulate emissions from unpaved roads as a contingency measure for the 24-hour standard is inappropriate and does not satisfy the requirements of the CAA because this measure is already part of the State's control strategy for the annual standard which precludes its designation as a "contingency" measure for the 24-hour standard. It is not clear that these "commitments" meet the requirement that contingency measures be capable of implementation with no further state or EPA action upon a finding that the area has failed to make reasonable further progress (RFP) or attain the PM<sub>10</sub> national ambient air quality standards (NAAQS) by the applicable attainment deadline.

**Response:**

Section 172 (c)(9) of the Clean Air Act requires that SIPs provide for the implementation of contingency measures if the Administrator finds that the nonattainment area has failed to make RFP toward attainment or to attain the standard by the applicable deadline. The purpose of contingency measures is to ensure that additional measures beyond or in addition to the required control measures immediately take effect when the area fails to make RFP or attain the PM<sub>10</sub> NAAQS. Committed, implemented measures may be considered contingency measures if they are not needed to show attainment and cannot hasten attainment. If triggered, however, the contingency measures must be implemented without further action by the State or EPA.

The 24-hour standard attainment demonstration analysis does not reflect the implementation of the annual plan committed control measure: Reduce Particulate Emissions from Unpaved Roads and Alleys.<sup>4</sup> This measure is set to occur, with no action necessary from the EPA or the state. If a milestone goal is missed, this measure will provide additional emission reductions and protection of public health and welfare.

A detailed discussion of RFP and 24-hour standard contingency measures is contained in the Contingency Measures section of the Revised Background Information document.

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**Edits to Final SIP Revision:**

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<sup>4</sup>Revised MAG 1999 Serious Area Particulate Plan for PM<sub>10</sub> for the Maricopa County Nonattainment Area, February 2000. Appendices Volume Four. Appendix C, Exhibit 3: Evaluation for Compliance with the 24-hour PM<sub>10</sub> Standard for the West Chandler and Gilbert Microscale Sites, June 1999, Arizona Department of Environmental Quality, pp 3-7 thru 3-9.

June 13, 2001

ADEQ determined some clarifications in the Revised Background Information document were appropriate. The clarifications are described below.

- On page 17, in paragraph 4, line 2, change the following reference “Arizona Administrative Code, Title 18, Chapter 2, § 609-611” to “Arizona Administrative Code, Title 18, Chapter 2, § 610-611”
- On page 17 - 18, added information to clarify why more than one BMP was not required to be implemented for each category.
- On page 31 paragraph 5, line 3, remove “A follow up workshop is planned for Summer 2001.” replace with “Additional educational outreach opportunities will be arranged in conjunction with other planned agricultural events in Summer and Fall 2001.”
- On page 32 in paragraph 4, sentence 3, remove “Arizona Department of Agriculture” from the sentence.
- In Enclosure 3, Attachment 4, on page 3, paragraph 5, line 6, insert “and agricultural land” following “Next, the number of acres of vacant land”
- In Enclosure 3, Attachment 4, on page 3, paragraph 5, line 10, insert “or agricultural acres” following “If there were no vacant acres”
- Enclosure 3, Attachment 8 was added to clarify why some potential practices were not included in the Agricultural PM<sub>10</sub> General Permit